



**STUDY MODULE PROGRAMME (SMP)**

|             |                   |        |             |     |                  |  |  |  |              |
|-------------|-------------------|--------|-------------|-----|------------------|--|--|--|--------------|
| Module Code | S                 | 274    | M           | 031 | Accredited until |  |  |  | Renewal date |
|             | Branch of Science | Progr. | Registr. №. |     |                  |  |  |  |              |

**Entitlement**

Social Research Methodology and Statistics

**Prerequisites**

Research methodology module for bachelor studies, bachelor studies

**Course (module) Learning Outcomes**

| No. | Learning Outcomes   | Teaching / Learning Methods                           | Assessment Methods   |
|-----|---|---|--|
| 1   | Students will be able to organize learning activities individually, accept scientifically informed decisions, communicate with the audience and share knowledge | Interactive lecture, Scientific paper analysis        | Individual work, Problem-solving task, Reflection on action, Scientific paper (text) analysis        |
| 2   | To know and understand cognition of social sciences phenomenon.   | Problem-based learning                                | Reflection on action   |
| 3   | On the basis of fundamental and applied scientific knowledge construct research design.   | Case analysis (Case study), Discussion                | Case analysis (study), Course project, Group work, Individual work, Scientific paper (text) analysis |
| 4   | Understand and critically analyse problems of research ethics.  | Case analysis (Case study), Scientific paper analysis | Background reading, Scientific paper (text) analysis   |

**Main aim**

On the basis of fundamental and applied scientific knowledge to provide students with skills and analyze, critically assess the social reality of the phenomena, developing the skills needed for research activities, to develop practical skills to plan studies, collect data, analyze them, and to provide scientific conclusions.

**Summary**

The module covers topics related to the modern concept of science and the knowledge of the complexity of social reality. Scientific problem and hypotheses. Research validity and reliability issues. Sample and sampling procedures. Data collection methods in social sciences. Scientific article preparation. Research ethics issues.

**Level of module**

| Level of programme |        | Subject group (under the regulation of the area) | Subject level |
|--------------------|--------|--|---------------|
| Cycle              | Type   |  |               |
| Second             | Master | Specialaus lavinimo                              | Deepening     |

**Group under financial classification**

**Syllabus**

| No. | Sections and themes   | Responsible lecturer |
|-----|---|----------------------|
| 1.  | Features of modern science. Cognition of social phenomenon. Relation between social and biomedical sciences |                      |
| 2.  |   |                      |
| 3.  | Searching for research problem and research problem formulation.  |                      |
| 4.  | Methodology of applying research methods. Validity and reliability.   |                      |
| 5.  | Research sample and sampling.   |                      |
| 6.  | Qualitative and quantitative research methods and data analyses   |                      |

| Nº. | Sections and themes  | Responsible lecturer |
|-----|--|----------------------|
| 7.  | Introduction to SPSS. Research matrix. Scales of data, coding. Data arrangement and transforming |                      |
| 8.  | Data arrangement and transforming  |                      |
| 9.  | SPSS possibilities for data presentation   |                      |
| 10. | Statistical hypothesis testing. Parametric and non-parametric criterions                         |                      |
| 11. | Crosstabulation. Analysis of survey research.  |                      |
| 12. | Questions reliability. Confirmatory factor analysis  |                      |
| 13. | Correlation coefficient.   |                      |
| 14. | Regression analysis  |                      |
| 15. | Analysis of variance   |                      |
| 16. | Experimental data analysis   |                      |
| 17. | Scientific publication   |                      |

Evaluation procedure of knowledge and abilities:

#### References

| Nº. | Title   |
|-----|---|
| 1.  | Bartram, D., Berberoglu, G., Grégoire, J., Hambleton, R. K., Muñiz, J., & van de Vijver, F. (2018). ITC guidelines for translating and adapting tests (second edition). International Journal of Testing, 18(2), 101–134.   |
| 2.  | Bhattacherjee, A. (2012). Social science research: Principles, methods, and practices. Prieiga internetu: <a href="http://scholarcommons.usf.edu/oa_textbooks./3">http://scholarcommons.usf.edu/oa_textbooks./3</a>   |
| 3.  | Bird, S. (2019). Research methods in physical activity and health. London: Routledge (elektroninė knygos versija LSU bibliotekoje)  |
| 4.  | Cohen, L., Manion, L., Morrison, K. (2013). Research methods in education (7 ed.). London: Routledge.   |
| 5.  | Cypress, B. S. (2017). Rigor or reliability and validity in qualitative research: Perspectives, strategies, reconceptualizations, and recommendations. Dimensions of Critical Care Nursing, 36(4), 253-263.   |
| 6.  | Garson, G.D. (2012). Univariate GLM, ANOVA, and ANCOV. A <a href="http://faculty.chass.ncsu.edu/garson/PA765/anova.htm">http://faculty.chass.ncsu.edu/garson/PA765/anova.htm</a>  |
| 7.  | Garson, G.D. (2012). GLM Repeated Measures. Prieiga internetu: <a href="http://faculty.chass.ncsu.edu/garson/PA765/glmrepeated.htm">http://faculty.chass.ncsu.edu/garson/PA765/glmrepeated.htm</a>  |
| 8.  | Kardelis, K. (2016). Mokslių tyrimų metodologija ir metodai: edukologija ir kiti socialiniai mokslai: vadovėlis. Vilnius: Mokslo ir enciklopedijų leidybos centras.   |
| 9.  | Pakalniškienė, V. (2012). Tyrimo ir įvertinimo priemonių patikimumo ir validumo nustatymas. Vilnius: Vilniaus universiteto leidykla. Prieiga internetu: <a href="https://www.vu.lt/site_files/LD/Tyrimo_ir_%C4%AFvertinimo_priemoni%C5%B3_patikimumo_ir_validumo_nustatyti.html">https://www.vu.lt/site_files/LD/Tyrimo_ir_%C4%AFvertinimo_priemoni%C5%B3_patikimumo_ir_validumo_nustatyti.html</a> |
| 10. | Patten, M. L., & Newhart, M. (2018). Understanding research methods. An overview of the essentials. London: Routledge.  |
| 11. | Pukėnas, K. (2005). Sportinių tyrimų duomenų analizė SPSS programa. Prieiga internetu: <a href="http://emokymas.lsu.lt/course/view.php?id=655">http://emokymas.lsu.lt/course/view.php?id=655</a>  |
| 12. | Pukėnas, K. (2011). Kokybinių duomenų analizė SPSS programa. Kaunas: LKKA.  |
| 13. | Smith, B., & Caddick, N. (2012). Qualitative methods in sport: a concise overview for guiding social scientific sport research. Asia Pacific Journal of Sport and Social Science, 1(1), 60-73.  |
| 14. | Smith, B., & McGannon, K. R. (2018). Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. International review of sport and exercise psychology, 11(1), 101-121.  |
| 15. | Siddaway, A. P., Wood, A. M., & Hedges, L. V. (2019). How to do a systematic review: a best practice guide for conducting and reporting narrative reviews, meta-analyses, and meta-syntheses. Annual review of psychology, 70, 747-770.   |
| 16. | Sparkes, A.C., Smith, B. (2014). Qualitative research methods in sport, exercise and health. London: Routledge  |

| Nº.                   | Title  |
|-----------------------|--|
| 17.                   | Sparkes, A.C. (2015). Developing mixed methods in sport and exercise psychology: critical reflections on five points of controversy. <i>Psychology of Sport and Exercise</i> , 16, 49-59.  |
| 18.                   | Thomas, J.R., Nelson, J.K., & Silverman, S.J. (2015). Research methods in physical activity (7th edition). Human Kinetics, Champaign   |
| 19.                   | Veal, A.J., & Darcy, S. (2014). Research methods in sport studies and sport management: a practical guide. Oxon: routledge   |
| Additional literature |  |
| 1.                    | Almanasreh, E., Moles, R., & Chen, T. F. (2019). Evaluation of methods used for estimating content validity. <i>Research in Social and Administrative Pharmacy</i> , 15(2), 214-221.   |
| 2.                    | Cleland, J., Dixon, K., & Kilvington, D. (2019). Online research methods in sport studies. Routledge.  |
| 3.                    | Healey, J. F. (2015). The essentials of statistics: A tool for social research. Cengage Learning.  |
| 4.                    | Lunnay, B., Berlogdan, J., McNaughton, D. (2015). Ethical use of social media to facilitate qualitative research. <i>Qualitative Health Research</i> , 25(1), 99-109.  |
| 5.                    | Meyer, K. E., Van Witteloostuijn, A., & Beugelsdijk, S. (2017). What's in ap? Reassessing best practices for conducting and reporting hypothesis-testing research. <i>Journal of International Business Studies</i> , 48, 535-551.                     |
| 6.                    | Palinkas, L.A., Horwitz, S.M., Green, C.A., Wisdom, J.P., Duan, N., Hoggwood, V. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. <i>Adm Policy Ment Health</i> , 42(5), 537-544.     |
| 7.                    | Rockinson-Szapkiw, A. (2013). Statistics guide. Prieiga internetu: <a href="http://amandaszapkiw.com/elearning/statistics-guide/downloads/Statistics-Guide.pdf">http://amandaszapkiw.com/elearning/statistics-guide/downloads/Statistics-Guide.pdf</a> |
| 8.                    | Sim, J., Saunders, B., Waterfield, J., & Kingstone, T. (2018). Can sample size in qualitative research be determined a priori?. <i>International Journal of Social Research Methodology</i> , 21(5), 619-634.  |
| 9.                    | Smith, C.J. (2012). Type I and Type II errors: What are they and why do they matter? <i>Phleiology</i> , 27, 199-200.  |
| 10.                   | Statistical Associates Publishers, <a href="http://www.statisticalassociates.com/">http://www.statisticalassociates.com/</a>   |
| 11.                   | Yilmaz, K. (2013). Comparison of qualitative and quantitative research traditions: epistemological, theoretical, and methodological differences. <i>European Journal of Education</i> , 48(2), 311-325.  |

Coordinating lecturer

| Position  | Degree, surname, name | Schedule №. |
|-----------|-----------------------|-------------|
| Professor |                       | 33          |

Subdivision

| Entitlement | Code |
|-------------|------|
| a           | 1006 |

Study module teaching form №. 1

| Semester | Mode of studies | Structure |          |           |           | Total hours | Credits |
|----------|-----------------|-----------|----------|-----------|-----------|-------------|---------|
|          |                 | Theory    | Seminars | Lab Works | Ind. work |             |         |
| A        | S               | D         | 12       | 18        | 0         | 230         | 260     |
|          |                 |           |          |           |           |             | 10      |

Languages of instruction:

|            |   |         |   |         |   |        |   |        |   |       |      |
|------------|---|---------|---|---------|---|--------|---|--------|---|-------|------|
| Lithuanian | L | English | E | Russian | R | French | F | German | G | Other | Oth. |
|------------|---|---------|---|---------|---|--------|---|--------|---|-------|------|

Plan of in-class hours

| Nº. of Themes | Academic hours |          |           | Nº. of Themes | Academic hours |          |           |
|---------------|----------------|----------|-----------|---------------|----------------|----------|-----------|
|               | Theory         | Seminars | Lab Works |               | Theory         | Seminars | Lab Works |
| 1.            | 1              | 0        | 0         | 10.           | 1              | 1        | 0         |

| Nº. of Themes | Academic hours |          |           | Nº. of Themes | Academic hours |          |           |
|---------------|----------------|----------|-----------|---------------|----------------|----------|-----------|
|               | Theory         | Seminars | Lab Works |               | Theory         | Seminars | Lab Works |
| 2.            | 2              | 0        | 0         | 11.           | 0              | 1        | 0         |
| 3.            | 2              | 1        | 0         | 12.           | 0              | 1        | 0         |
| 4.            | 2              | 1        | 0         | 13.           | 0              | 1        | 0         |
| 5.            | 1              | 2        | 0         | 14.           | 1              | 3        | 0         |
| 6.            | 1              | 1        | 0         | 15.           | 0              | 2        | 0         |
| 7.            | 0              | 1        | 0         | 16.           | 0              | 1        | 0         |
| 8.            | 0              | 1        | 0         | 17.           | 1              | 0        | 0         |
| 9.            | 0              | 1        | 0         |               | Total:         | 12       | 18        |

## Schedule of individual work tasks and their influence on final grade